

DOCUMENT-IDENTIFIER: US 20050074986 A1

TITLE: Absorber layer for DSA processing

current application

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Abstract Paragraph - ABTX (1):

A method of processing a substrate comprising depositing a layer comprising **amorphous carbon** on the substrate and then exposing the substrate to electromagnetic radiation have one or more wavelengths between about 600 nm and about 1000 nm under conditions sufficient to heat the layer to a temperature of at least about 300.degree. C. is provided. Optionally, the layer further comprises a dopant selected from the group consisting of nitrogen, boron, phosphorus, fluorine, and combinations thereof. In one aspect, the layer comprising **amorphous carbon** is an anti-reflective coating and an absorber layer that absorbs the electromagnetic radiation and anneals a top surface layer of the substrate. In one aspect, the substrate is exposed to the electromagnetic radiation in a **laser annealing** process.

Summary of Invention Paragraph - BSTX (11):

[0010] Embodiments of the invention provide a method of processing a substrate comprising depositing a layer on the substrate, and then exposing the substrate to electromagnetic radiation have one or more wavelengths between about 600 nm and about 1000 nm under conditions sufficient to heat the layer to a temperature of at least about 300.degree. C. In one aspect, the layer comprises **amorphous carbon**. In another aspect, the layer further comprises nitrogen, boron, phosphorus, fluorine, or combinations thereof. In one embodiment, exposing the substrate to the electromagnetic radiation comprises **laser annealing** the substrate.